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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,096	06/15/2000	David J. Diller	1073.060	8927

23405 7590 06/17/2002

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EXAMINER

SHEINBERG, MONIKA B

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 06/17/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/595,096

Applicant(s)

DILLER ET AL.

Examiner

Monika B Sheinberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 5 and 10.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION*****Response to Amendment B***

Applicants' arguments, filed 03 April 2002, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

In addition it is to be noted that although the response indicates that agreements were reached during the telephonic examiner interview on 01 March 2002, **no** agreements were reached as per the attached examiner interview summary, Paper No. 10. Potential amendments were discussed and taken into consideration, however this does not indicate agreement.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 11 and 21 are directed to a computerize-aided method of docking a molecule.

Applicant points to pages 5 and 6 for support of the amendment. However page 5 states one of the "several advantages" (lines 7-8) of the instant docking method is that "it is built from several independent pieces" (lines 8-9). It is not specified what these "pieces" are representative of, and thus do not exclude pieces or fragments of ligands/molecules. In addition, the paragraph continues to discuss the problem with combinatorial libraries "frequently [not having] a clear anchor fragment", leading to the interpretation that the anchor fragment is a resolved problem in the method. The specification as pointed to (pages 5 and 6) do not disclose any clear

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contemplation of not using an incremental construction method as claimed. Negative limitations in the claim should teach what the invention is and not what it is not. In addition, unless the specification discloses that the computer-aided method carries out computationally simultaneous, parallel processes, the ligand/molecule sequentially processes, thus in fragments, each hot spot for conformational analysis. Thus support for the amendment is not apparent in the specification in the sections neither pointed to nor anywhere else.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9, 11-17, 19, 21-27, and 29, are rejected under 35 U.S.C. 102(b) based upon anticipation of the invention, by Ho et al. (Pro. of 27<sup>th</sup> Hawaii Int'l Conf. on System Science, 1994).

The rejection is maintained and reiterated from the office actions mailed 16 May 2001 and 03 December 2001. Applicants argue that Ho et al. teaches a method that uses fragments of chemical compounds while the instant invention uses the "entire" chemical compound. The first step of Ho et al's method still meets the limitations of the instant claims because the first fragment/ligand to be docked is in itself not incrementally constructed. A fragment of a chemical compound still contains the capabilities of providing an effector portion as a whole compositional compound. In addition the claims only state conformational structures, which encompass fragments of compounds. In addition, there is no disclosed difference between a ligand and a molecule to indicate a probable reason for replacing "ligand" with "molecule". A ligand/molecule itself is a generic term, thus any molecule (small, large) or a fragment are encompassed by the terms. The claimed method of docking reads upon initial docking methods as well, or anchor fragments. Thus the applicant's argument is non-persuasive.

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Claims 8, 10, 18, 20, 28, and 30 are rejected under 35 U.S.C. 102(b) based upon anticipation of the invention, by Ho et al. (Pro. of 27<sup>th</sup> Hawaii Int'l Conf. on System Science, 1994).

The rejection is maintained and reiterated from the previous office action mailed 03 December 2001. Applicant did not direct any arguments towards this rejection, however the amendments of "molecule" and "no incremental construction" are discussed above as new subject matter and non-persuasive in distinguishing the claims over the Ho et al reference.

Therefore, the arguments are non-persuasive to overcome the rejection.

### ***Conclusion***

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Inquiries***

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monika B. Sheinberg, whose telephone number is (703) 306-0511. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M. If attempts to reach the examiner by

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telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703) 305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

*Marianne P. Allen*  
MARIANNE P. ALLEN  
PRIMARY EXAMINER  
~~GROUP 1800~~  
AU1631

June 14, 2002

Monika B. Sheinberg  
Art Unit 1631

*MBS*